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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,170	06/13/2001	Eun Cheol Lee	YHK-0066	3664
34610	7590	01/10/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			WU, XIAO MIN	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/879,170

Applicant(s)

LEE ET AL.

Examiner

XIAO M. WU

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action and the declaration under 37 C.F.R. 1.131 is persuasive and, therefore, the finality of that action is withdrawn. However, upon further consideration, a new ground of rejection is made in view of new prior art reference to Hideyuki (JP 10144225).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6-9, 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hideyuki (JP 10144225).

As to claim 1, Hideyuki discloses a plasma display panel (Fig. 7), comprising: an address electrode (66) included in each discharge cell making a unit pixel (70, Fig. 5) of the plasma display panel; a plurality of second sustain electrodes (50) positioned at each periphery of the discharge cell (70) in a direction crossing the address electrode (66) to receive a second sustaining pulse (Fig. 4); and at least one of the first sustain electrodes (52) positioned at the center of the discharge cell (70) in a direction crossing the address electrode (66) to receive a first sustaining pulse (Fig. 4) applied alternatively with respect to the second sustain electrodes (see Fig. 4).

As to claim 2, Hideyuki discloses that the first sustain electrodes (52) are provided between the second sustain electrodes (50).

As to claim 3, Hideyuki discloses a bus electrode arranged in parallel to the first sustain electrode at the center of the first sustain electrode (see Fig. 3b).

As to claim 6, Hideyuki discloses a first barrier rib formed in parallel to the address electrode (see Fig. 3).

As to claims 7 and 8, it is noted that Hideyuki disclose a second barrier rib formed in a direction crossing the first barrier rib and the second barrier rib is provided at an interface of the discharge cells (see Fig. 3).

As to claim 9, Hideyuki discloses a scan/sustain driver (74, Fig. 3a) connected to the first sustain electrode (52) to apply the scanning pulse Fig. 4) and the first sustaining pulse (Fig. 4); and a common sustaining driver (74, Fig. 3a) connected to the second sustain electrode (50) to apply the second sustaining pulse (Fig. 4).

As to claims 13, 14, note the discussion of claim 1 above, Hideyuki further discloses applying a reset pulse (Fig. 4) to the second sustain electrode (50) and applying a data pulse (Fig. 4) synchronized with the scanning pulse Fig. 4) to the scanning electrode (52).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being obvious over Hideyuki (JP 10144225) in view of Kim (US Patent No. 6,380,678).

As to claims 11, it is noted that Hideyuki fails to disclose at least two floating electrodes formed in a parallel to the first and second sustain electrode at the rear side of the dielectric layer. Kim is cited to teach a plasma display device comprises two floating electrodes (130, 130', Fig. 4) formed in parallel to the first and second sustain electrodes (211, Fig. 4) at the rear side of the dielectric layer (212, Fig. 4). It would have been obvious to one of ordinary skill in the art to have modified Hideyuki with the features of the floating electrodes as taught by Kim because the wall charge can be generated on the sides of the isolation wall in which the floating electrodes are formed (col. 4, lines 38-53).

As to claim 12, Kim further discloses the floating electrodes (130, Fig. 4) are provided under the second sustain electrode (211, Fig. 4).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being obvious over Hideyuki (JP 10144225) in view of Marcotte (US Patent No. 6,118,214).

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As to claim 4, it is noted that Hideyuki does not disclose bus electrodes arranged in parallel to the first sustain electrode at each edge of the first sustain electrode. Marcotte is to teach a plasma display device comprises bus electrodes arranged in parallel to the sustain electrode. For example, as shown in 4, Marcotte discloses border electrodes 64 which are arranged in parallel to the sustain electrode 56. it would have been obvious to one of ordinary skill in the art to have modified Hideyuki with the features of the bus electrode as taught by Marcotte because the border electrodes can provide a uniform boundary for the discharge gap and ensure a uniform discharge voltage between adjacent electrode structures (col. 3, lines 33-37).

*Allowable Subject Matter*

5. Claims 5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached on (703) 305-4709.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

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**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.  
VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

xw

January 7, 2005

  
**XIAO WU**  
**PRIMARY EXAMINER**  
**ART UNIT 2674**